

**Notice of Allowability**

Application No.

09/311,718

Examiner

Dung Nguyen

Applicant(s)

SONG ET AL.

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment dated 09/24/2003.
2. ☒ The allowed claim(s) is/are 13-16, 23-26, 28, 29, 31-34, 41-43 and 59-77.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
- (b) ☒ including changes required by the proposed drawing correction filed 17 April 2003, which has been approved by the Examiner.
- (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- 1 ☐ Notice of References Cited (PTO-892)
- 3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 5 ☐ Information Disclosure Statements (PTO-1449), Paper No. \_\_\_\_\_.
- 7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)
- 4 ☐ Interview Summary (PTO-413), Paper No. \_\_\_\_\_.
- 6 ☐ Examiner's Amendment/Comment
- 8 ☐ Examiner's Statement of Reasons for Allowance
- 9 ☐ Other

### **DETAILED ACTION**

Applicants' amendment dated 09/24/2003 has been received and entered.

#### ***Reasons for Allowance***

1. Claims 13-16, 23-26, 28, 29, 31-34, 41-43 and 59-77 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The references of record neither disclose nor make obvious a liquid crystal display device comprising a first substrate having a common electrode, a second substrate having a pixel electrode and facing the first substrate, a plurality of protrusions formed on a common electrode, and:

- . wherein the protrusion has a first branch extending along an edge of a pixel electrode from a position at which an aperture formed on the pixel electrode meets the edge of the pixel electrode with an acute angle as set forth in claim 13;
- . the shape of the protrusion is a tetragon surrounding the X shaped aperture as set forth in claims 23 and 31;
- . the protrusion is located substantially outside edges of the pixel electrode as set forth in claim 33;
- . a portion of the protrusion overlaps edges of the pixel electrode as set forth in claim 34;
- . a black matrix on a second substrate including a first portion overlapping the protrusion, a second portion passing through bent points of the protrusion the aperture and a third portion covering a region where the protrusion and the aperture meet a boundary of the pixel electrode as set forth in claim 41;

wherein either first and second protrusions or imaginary extensions of the first and second protrusions meet each other as set forth in claim 59.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 703-305-0423. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 703-305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

DN  
10/10/2003

  
**Dung Nguyen**  
**Patent Examiner**  
**Art Unit 2871**